

Appl. Serial No. 10/676,220  
Amendment Dated September 29, 2006  
Reply to Office Action Mailed June 29, 2006

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REMARKS

In the Office Action dated June 29, 2006, 1, 3-14, and 17-24 were rejected under 35 U.S.C. § 102 over U.S. Patent No. 6,212,097 (Kihara).

Although the Office Action indicated that the status of referenced U.S. applications should be updated, it is noted that the present application does not refer to any related application.

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REJECTION UNDER 35 U.S.C. § 102

It is respectfully submitted that claim 1 is not anticipated by Kihara. Claim 1 recites a storage system having a storage medium containing blocks identified by block addresses, the storage medium to store data in hierarchical data structures, *each* hierarchical data structure containing *plural levels of data objects*, and each hierarchical data structure stored in a respective group of the blocks. Claim 1 further recites that a storage location stores a table having plural entries, each of the plural entries mapping a corresponding identifier of a hierarchical data structure to a respective range of block addresses. Claim 1 further recites that a controller responds to a request containing an identifier of at least one of the hierarchical data structures by generating one or more block addresses based on the identifier in the request by accessing the table.

A first point of error made in the Office Action is the assertion that the "root directory format in FAT reads on" the hierarchical data structures of claim 1. See 6/29/2006 Office Action at 3. It is noted that there is just *one* root directory in the memory map depicted in Fig. 6 of Kihara. Thus, it is unclear from the rejection in the Office Action how the one root directory in Kihara can constitute the plural hierarchical data structures (where each hierarchical data structure contains plural levels of data objects) recited in claim 1.

A second point of error made in the Office Action is the assertion that the FAT and column 11, lines 25-30 & 55-57, of Kihara disclose the table recited in claim 1. The passage at column 11, lines 25-30, refers to a logical-physical address conversion table to convert logical addresses to physical addresses. The passage at column 11, lines 55-57 refers to a route directory area that contains directory entries having a file attribute, update date, and file size.

The FAT cannot be the table recited in claim 1, because the FAT does not have plural entries each mapping a corresponding identifier of a hierarchical data structure to a respective range of block of block addresses. As explained in Norton Utilities Version 5.0—Disk Explorer (hereinafter "Norton"), a reference cited in the Office Action, the FAT is used to indicate whether a cluster is free or in use by a file, and to indicate whether a cluster is bad. See Norton, p. 39. The FAT also keeps information to allow chaining of clusters that correspond to a file. *Id.*, p. 40. Clearly, a person of ordinary skill in the art would recognize that the FAT does not have

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entries each mapping an identifier of a corresponding hierarchical data structure to a respective range of addresses.

The route directory area in the passage at column 11, lines 55-57 of Kihara referenced by the Office Action also is not the table of claim 1, as the route directory area contains information such as a file attribute, an update data, and file size—there is no information to convert an identifier of a hierarchical data structure to a range of block addresses.

The cited passage at column 11, lines 25-30, of Kihara cited by the Office Action refers to a logical address to physical address conversion table. However, the logical address that is the subject of the conversion table of Kihara is *not* an identifier of a hierarchical data structure having plural levels of data objects. As best seen in Fig. 5 of Kihara, the logical address is contained within a page, where a page is one of several pages contained in a block. The logical address referred to in Kihara identifies the lowest-level element in Fig. 5, namely the page. Clearly, this logical address does *not* identify a hierarchical data structure having plural levels of data objects.

Thus, the passages of Kihara cited by the Office Action clearly do not teach the table recited in claim 1.

A third point of error made in the Office Action is the identification of directory entries and sub directories as being the entries of the table. These directory entries and sub directories are clearly *not* part of the conversion table discussed above. Kihara discloses that the memory map of Fig. 6 includes a root directory area and a sub directory area. The directory entries and sub directories are clearly not part of the conversion table—therefore, any implication by the Office Action that such entries are part of the conversion table is clearly erroneous. Kihara does mention that on the memory map, logical addresses have been converted into physical addresses based on the conversion table. As discussed above, this conversion table does not convert identifiers of *hierarchical data structures* to ranges of block addresses.

A fourth point of error made in the Office Action is the failure to identify what in Kihara constitutes the request containing an identifier of a hierarchical data structure, and how the control block 41 (cited by the Office Action) generates one or more block addresses based on the identifier in the request by accessing the table. The Office Action cited generally to the memory map of Fig. 6, and to column 10, lines 4-7, and column 11, lines 60-67 of Kihara. The cited

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passage in column 10 refers to physical addresses and logical addresses, and the cited passage in column 11 refers to the different areas of the memory map. However, none of the cited passages refer to a controller responding to a request containing an identifier of a hierarchical data structure by generating one or more block addresses based on the identifier in the request by accessing the table.

In view of the various points of error committed in the Office Action, it is respectfully submitted that the Office Action has failed to establish that Kihara anticipates claim 1.

Independent claim 17 is also not anticipated by Kihara. The Office Action asserted that Kihara teaches an external controller that sends a command to the DSP 30 depicted as part of the digital audio recorder/player of Fig. 1 of Kihara. As noted by Kihara, this command can be a record command or a reproduction command. Kihara, 6:42-44.

However, there is absolutely no indication or hint by Kihara that the record or reproduction command includes an identifier of a hierarchical data structure (which has been equated by the Office Action with the "root directory format" of Kihara). 6/29/2006 Office Action at 5. There is no teaching by Kihara that any command issued by the external controller of Kihara would contain an identifier of a root directory, as suggested by the Office Action. In view of the above, it is respectfully submitted that Kihara clearly does not anticipate the subject matter of claim 17.

Independent claim 20 is similarly allowable.

Dependent claims are allowable for at least the same reasons as corresponding independent claims.

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Allowance of all claims is respectfully requested. The Commissioner is authorized to charge any additional fees and/or credit any overpayment to Deposit Account No. 08-2025 (200207307-1).

Respectfully submitted,

Date: \_\_\_\_\_

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